e-Learning in Malaysian Higher Education Institutions: Status, Trends, & Challenges

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# Content

## Foreword

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Chapter 5

e-Learning Training in Malaysian Institutions of Higher Learning

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Introduction

Current developments that occur either in terms of theory and practice, teaching methodology and learning strategies, tools, and technologies that can assist in the teaching and learning process, require HEIs to be sensitive and responsive to change and innovation. In light of this, exposure to new knowledge and skills need to be updated and provided to staff to ensure that the HEIs are not left behind in the wave of world class education. Thus, the training programmes for administrative staff, academic staff, and support staff must be well planned. One training aspect required in the 21st century is e-Learning training.

To understand the status of e-Learning training in Malaysian HEIs, from this study, data were collected from 26 e-Learning administrators and 1,635 lecturers in Malaysian HEIs. Next, this chapter will discuss the findings of this study. The discussions will be divided into research methodology, findings, and implications of the study.

Methodology

In the e-Learning research conducted in Malaysian HEIs, 26 e-Learning administrators responded to the Malaysian HEIs e-Learning Questionnaire (IT Manager) and 1,635 lecturers answered the Malaysian HEIs e-Learning Questionnaire (Instructor) online. Analysis for the e-Learning training aspect includes 15 items from the Malaysian HEIs e-Learning Questionnaire (IT Manager) and 6 items from the Malaysian HEIs e-Learning Questionnaire (Instructor). The results are described according to three areas, namely, (i) status of e-Learning training, (ii) trends and effectiveness of
such training, and (iii) problems and challenges in the implementation of e-Learning training in Malaysian HEIs.

Findings

Status of e-Learning Training

Data in Figure 5.1 show that all HEIs involved in this study conduct e-Learning training for their academic staff. However, only 69.2% or 18 HEIs conduct training for support staff (see Figure 5.2), and 50% of the HEIs conduct e-Learning training for their students (see Figure 5.3). From the perspective of the contents of training conducted, as shown in Figure 5.4, content is usually focused on making staff skilled in using the applications available in the LMS (96.2%) and introduction to e-Learning (84.6%). Some of the HEIs offer training associated with e-Learning pedagogy (57.7%) and e-Content development (53.8%). In addition, only one-third of HEIs (34.6%) included Web 2.0 applications in their e-Learning training for their teaching staff.

![Figure 5.1: Number/Percentage of HEIs that provide e-Learning training for academic staff](image)
Figure 5.2: Number/Percentage of HEIs that provide e-Learning training for support staff

Figure 5.3: Number/Percentage of HEIs that provide e-Learning training for students
With regard to e-Learning training, the study found that the majority of the HEIs (84.6%) provide e-Learning training as part of their academic staff training and development programmes in their respective institutions (see Figure 5.5). In addition, 11 HEIs conduct e-Learning training 1 to 3 times a year (42.3%), 9 HEIs conduct training more than 6 times a year (34.9%), while 6 HEIs conduct training 4 to 6 times a year (23.1%) (see Figure 5.6). Majority of training (73.1%) was conducted in one day, while only a small proportion (26.9%) of training was conducted in more than one day (Figure 5.7). The main mode of training (see Figure 5.8) is face-to-face (92.3%) followed by the blended mode (42.3%) and on-demand (34.6%). The percentage of fully online (11.5%) and CD-based (7.7%) training is very small. Only 6 HEIs (23.1%) make e-Learning training mandatory for all academic staff; while 7 HEIs (26.7%) make it mandatory for new staff only. Half of the HEIs surveyed carried out their e-Learning training on a voluntary basis (see Figure 5.9).
Figure 5.5: Number/Percentage of HEIs that provide e-Learning training as part of their academic staff training and development programmes

Figure 5.6: Frequency of e-Learning training carried out in a year
Figure 5.7: Duration of e-Learning training conducted by Malaysian HEIs

Figure 5.8: The main modes of e-Learning training in Malaysian HEIs
The findings concerning trainers involved in e-Learning trainings in HEIs are shown in Figure 5.10. The study showed that e-Learning training is usually conducted by internal trainers (100%); however, there are several institutions that invited outside consultants (34.6%) to conduct some of the e-Learning training programmes. None of the HEIs used the services of foreign consultants for their e-Learning training programmes. Typically, the internal trainers have attended TOT (Training of Trainers) programmes related to e-Learning (73.1%), attended workshops/seminars on e-Learning at the national and international levels (42.3%) and/or have Ph.D. qualifications. There are also trainers (23.1%) who obtained relevant e-Learning skills through self-study (see Figure 5.11).
Figure 5.10: The main source of e-Learning trainers at Malaysian HEIs

Figure 5.11: Source of e-Learning training experts in Malaysian HEIs
In terms of e-Learning training given to academic staff, the study showed that more than half of the HEIs involved in this study have conducted e-Learning training for their respective academic staff (see Figure 5.12). However, 5 HEIs indicated that only 11% – 35% of their academic staff have been trained, 5 HEIs indicated less than 10%, while the majority of the HEIs indicated that 36%–50% of their academic staff have followed a training programme related to e-Learning. Only 57.7% or 15 HEIs offer follow-up programmes after the e-Learning training sessions (see Figure 5.13), while 30.8% or 8 HEIs make attendance to e-Learning training part of the annual appraisal for academic staff (see Figure 5.14).
Figure 5.13: Number/Percentage of HEIs that offer follow-up programmes after conducting e-Learning training at their respective institutions

Figure 5.14: Number/Percentage of HEIs that make e-Learning training attendance part of the staff annual appraisal
Data obtained from the 1,635 lecturer sample, who participated in this study, showed some interesting trends related to the implementation of e-Learning training in Malaysian HEIs. Figure 5.15 shows that almost two-thirds of respondents (65.7%) had undergone e-Learning training in the last two years in their respective institutions. In addition, a majority of them (77.3%) indicated that the e-Learning training was either effective or very effective (see Figure 5.16). As mentioned earlier in Figure 5.8, the main mode of training preferred by the lecturers (see Figure 5.17) is the face-to-face mode (45.1%) followed by the blended method (26.5%). The percentage of lecturers who are keen on fully online training mode (13%), CD-based (7.6%), and on demand mode (6.3%) is very small. Aspects or topics of interest to lecturers, as shown in Figure 5.18, are online assessment (67.7%), e-Content development (56.5%), content management (55.3%), and pedagogy related to e-Learning (38.3%). In terms of applying the knowledge and skills gained during the e-Learning training (see Figure 5.19), most of the lecturers (72.6%) felt that they have successfully applied it in their teaching. Only a small portion of lecturers (14.6%) felt that they managed to apply all the knowledge and skills learned, while 12.8% stated that they did not have the opportunity to apply what they learned during the e-Learning training.

![Figure 5.15: Number/Percentage of lecturers who have undergone e-Learning training in their respective institutions](image-url)
Figure 5.16: Lecturers’ opinion on the usefulness of the e-Learning training that they attended

Figure 5.17: Lecturers’ preferred training mode
Figure 5.18: e-Learning topics lecturers are keen on

Figure 5.19: Level of knowledge and skills applied after the e-Learning training
Problems & Challenges Related to e-Learning Training

In terms of e-Learning training (see Figure 5.20), two key challenges faced by most HEIs involved in this study are moderate levels of motivation among the teaching staff (69.2%) and low attendance during training (53.8%). Other challenges include lack of expert trainers (38.5%), lack of training modules (30.8%), and unsuitable training schedule (30.8%). The findings also indicated that lack of budget (26.9%) and lack of facilities (26.9%) were not major problems in implementing e-Learning training in Malaysian HEIs. In addition, one of the main reasons why most of the lecturers did not attend the e-Learning training conducted by their respective institutions is the inappropriate timing of the training schedule which is usually conducted in the middle of a semester, when they are busy with their teaching duties (see Figure 5.21).
Implication of Findings & Proposed Improvements

Although most of the HEIs have provided good infrastructure in their respective institutions and conducted a series of e-Learning training for their staff and students, there is still room for improvement. Based on the discussion of the findings above, there are several implications that can be addressed by a number of related parties including the Ministry of Higher Education (MOHE), HEIs, and lecturers. The findings of this study can help the three parties involved to address the problems/challenges faced by HEIs and to improve the quality of the e-Learning training content and the management of these training programmes.

The major implication at the national level is that MOHE should have a national e-Learning training policy to act as guidance for the coordination of training in all HEIs. With this policy, e-Learning training can be well planned to take into account the short, medium, and long-term needs and demands of e-Learning. More structured training programmes, an annual budget for e-Learning training, support centres, human capital development, incentives and motivation, continuous improvements in infrastructure, and integration with curriculum will be enhanced from time to time in the HEIs. Further, the implications of this study demand that the management team of the respective HEIs focuses on two main areas: management of e-Learning training and e-Content development training.
a. e-Learning Training Management

i. The management team of HEI should provide a strong e-Learning training programme in accordance with the national/HEI level e-Learning policy in order to strengthen the implementation of e-Learning in their respective institutions and consequently, to enhance the quality of education in this country.

ii. The management team of HEI should expose the staff to new technologies such as Web 2.0, Web 3.0, Web 4.0, and mobile technologies as well as upgrading the existing LMS according to the latest technologies and trends. Exposure to new technologies that can enhance the quality of teaching and learning should be emphasized on.

iii. The e-Learning training schedule and duration can be varied to ensure that more staff can attend the training and it will not affect their teaching duties. There should be short, medium, and long training sessions so that more people (from management, academic staff, and support staff) can be involved in the process of developing human capital in the respective institutions.

iv. The management is encouraged to give recognition or incentives to increase staff motivation to continue to integrate the latest technologies in e-Learning. Staff who are skilled enough to become internal as well as national e-Learning trainers should be given certificates, advance diplomas, and degrees to commensurate with their expertise.

v. The face-to-face mode should dominate e-Learning training practice supported by self-study and online learning.

b. Content Development Training

i. Specialized training programmes in e-Learning pedagogy should be increased and should involve more staff at the respective institutions. This is because e-Learning pedagogy is an important e-Learning training component which will determine the success and effectiveness of e-Learning at the respective institutions. At the same time, it will increase the number of e-Learning experts.

ii. Development of e-Learning content needs to be improved by involving more staff members at the respective institutions to undergo continuous training. The presence of dynamic and effective e-Learning content will strengthen the online teaching and learning process, and at the same time, enhance the quality of teaching and learning at HEIs.

Conclusion

This chapter has described the findings and implications of this study from the perspective of e-Learning training in Malaysian HEIs. In particular, we looked at the angles of the status of e-Learning training in HEIs, trends and effectiveness of such training, as well as problems and challenges in executing e-Learning training in Malaysian HEIs.

Based on an analysis of data collected, two main conclusions can be made: first, the majority of the HEIs in Malaysia are responsive to the needs and demands of e-Learning training. Almost all of the HEIs surveyed have conducted e-Learning training for their staff and students. However, the quality of training management and e-Learning training content needs to be improved. Coordination of e-Learning training at the national and HEI level should be given serious attention by the relevant stakeholders so that the quality of teaching and learning at HEIs will continue to be preserved.